



# MAN TRAP APPLICATION

## OVERVIEW

Commonly used in jails or prisons, a Man Trap requires one door to close and lock before a second can unlock.

## REQUIREMENTS

WinDSX Software Version 3.7 and higher. All Controllers must have firmware version 3129 or higher.

Both Doors used for the Man Trap application reside on the same Controller

Door Position switches on Input 7.

Request to Exit buttons on Input 8.

## PROGRAMMING

Substitute the appropriate Device, Input & Output addresses.

Using the names below can assist in programming.

**Location** - Select "Enable Linking Logic"

**Time Zone** - Create a total of 7 Time Zones.

To begin, define all Time Zones with a Start 0 and Stop 2400 everyday including holidays.

Program them all as "Time Zone is OFF when Linked to".

Below is a list of the 7 Time Zones, their names, and assignments:

- a) Door A Rex Disable > Assigned to Open A Linking Group
- b) Door A Output Off > Assigned to Device A Output 1 TZ
- c) Door A Reader Off > Assigned to Device A Reader TZ
- d) Door B Rex Disable > Assigned to Open B Linking Group
- e) Door B Output Off > Assigned to Device B Output 1 TZ
- f) Door B Reader Off > Assigned to Device B Reader TZ
- g) Master 24 X 7 > Assigned to Input 7s and used in Linking Groups

## Device

Add Two Devices. Door A and Door B.

Select "Door Open Detect Relock", "

Use Input 7 & 8", "Link Granted Events to Output 1", Unselect "Exit Request Unlocks Output 1".

Assign Time Zone "Door A Reader Off" to Device A Reader TZ.

Assign Time Zone "Door B Reader Off" to Device B Reader TZ.

## Outputs

Edit Door A Output 1 and assign it the "Door A Output Off" Time Zone

On the Options Tab

Set the "State When Linked To" to "Secure"

Set the "Perform Link When" to "Open".

Edit Door B Output 1 and assign it the "Door B Output Off" Time Zone

On the Options Tab

Set the "State When Linked To" to "Secure"

Set the "Perform Link When" to "Open".

## Inputs

1. Add Input A8. Name it "Door A Rex". Assign it "No" Time Zone.
2. Edit Door A Input 7. Assign it the "Master 24 x 7" Time Zone.
3. Add Input B8. Name it "Door B Rex". Assign it "No" Time Zone.
4. Edit Door B Input 7. Assign it the "Master 24 x 7" Time Zone.

## Linking Groups

Create 4 Linking Groups.

1. Create a Linking Group named "Disable A".
  - a. Under Outputs select "Output 1 for Door A".  
Assign the "Master 24 x 7" Time Zone with a Response of "Follow"
  - b. Set the Time Zone for Linking Group "Disable A"  
Select the "Door A Rex Disable"  
Assign the "Master 24 x 7" Time Zone with a Response of "Follow".
  - c. Under Time Zone, select the "Door A Reader Off".  
Assign the "Master 24 x 7" Time Zone with a Response of "Follow".
2. Create a Linking Group named "Disable B"
  - a. Under Outputs select "Output 1 for Door B"  
Assign the "Master 24 x 7" Time Zone and a Response of "Follow".
  - b. Set the Time Zone for Linking Group "Disable B"  
Select the "Door B Rex Disable"  
Assign the "Master 24 x 7" Time Zone with a Response of "Follow".
  - c. Under Time Zone, select the "Door B Reader Off"  
Assign it the "Master 24 x 7" Time Zone with a Response of "Follow".
3. Create a Linking Group named "Open A"
  - a. Under Outputs select "Output 1 for Door B"  
Assign the "Master 24 x 7" Time Zone and a Response of "Follow".
  - b. Under Time Zone, select the "Door A Output Off"  
Assign it the "Door A Rex Disable" Time Zone with a Response of "Pulse" for 6 seconds.
4. Create a Linking Group named "Open B" Add a New Linking Group and name it "Open B".
  - a. Under Outputs select "Output 1 for Door A"  
Assign the "Master 24 x 7" Time Zone and a Response of "Follow".
  - b. Under Time Zone, select the "Door B Output Off"  
Assign the "Door B Rex Disable" Time Zone with a Response of "Pulse" for 6 seconds.

## Linking Group Assignment

Assign the new Linking Groups in the following manner.

### Outputs

Output 1 Door A - Activates Linking Group "Disable B". Set the Perform Link When to "Open"

Output 1 Door B - Activates Linking Group "Disable A". Set the Perform Link When to "Open"

### Inputs

Input 8 Door A Rex - Activates Linking Group "Open A". Set the Perform Link On to "Status Change".

Input 7 Door A Status - Activates Linking Group "Disable B". Set the Perform Link On to "Status Change".

Input 8 Door B Rex - Activates Linking Group "Open B". Set Perform Link On to "Status Change".

Input 7 Door B Status - Activates Linking Group "Disable A". Set Perform Link On to "Status Change".

## OPERATION

When a Rex (Input 8) is faulted, the associated door is unlocked for 6 seconds and the second door is locked for the duration of the Input 8 fault.

When Output 1 is open the other Output 1 is secured for the duration, the second door's rex and reader are disabled for the duration.

When a Door Status switch (Input 7) is faulted the second door's rex and reader are disabled and the second door's Output 1 is secured for the duration.

# WORKSTATION CONTROLLED MAN TRAP

In Jails and Prisons, Man Trap can be controlled and operated with a single touch from the Workstation program. Time Zone Linking requires one Door to be linked closed when the other Door is open. Doors can be pulsed to remain unlocked for the required time period.

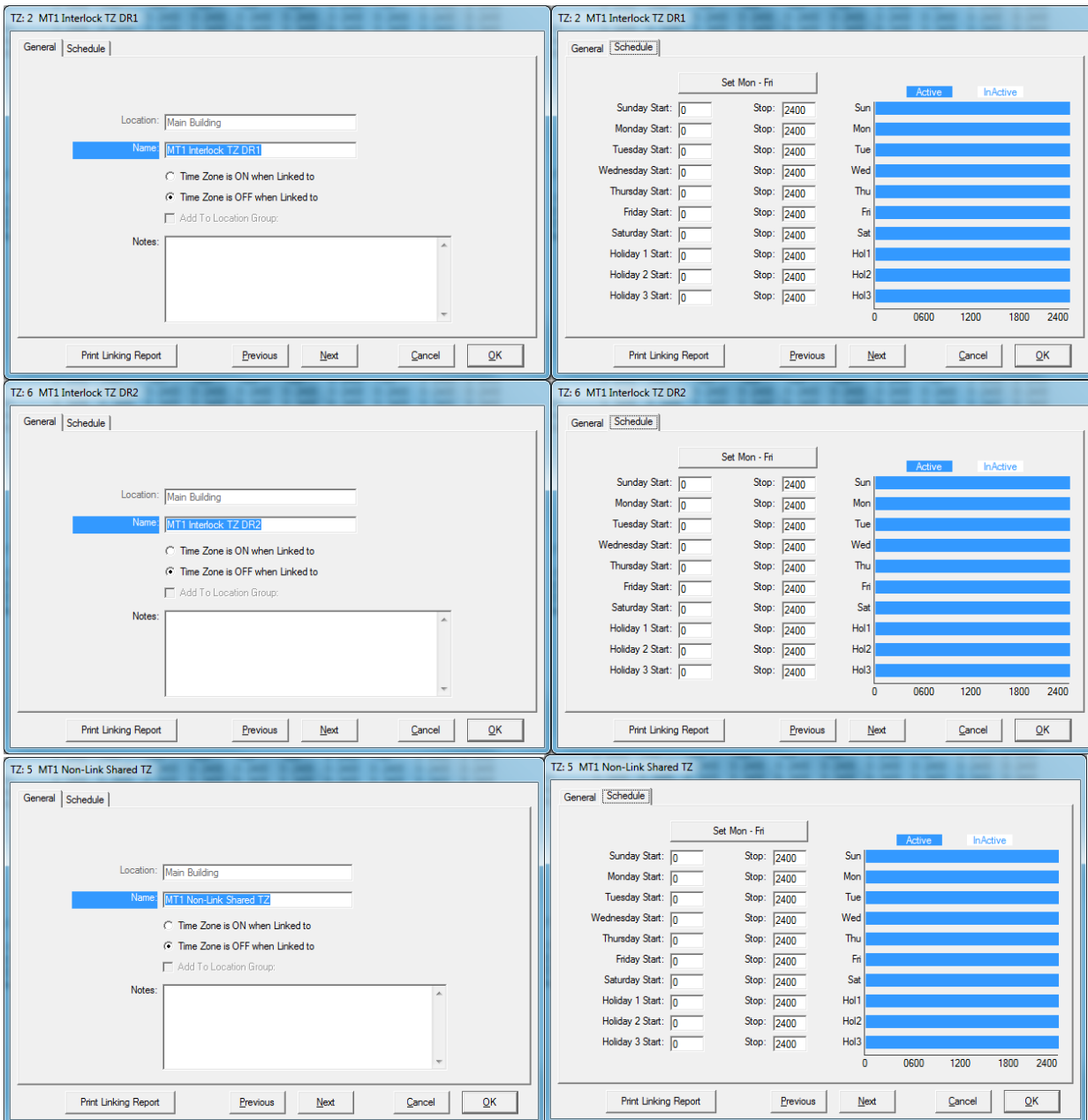
## SETUP FOR WORKSTATION CONTROL

The following illustration includes one set of Doors.

Any number of Man Traps can be setup using 1043 Outputs, 1044 Virtual Outputs, and Inputs from Door contacts.

**Time Zones** - Create the following two Time Zones for each set of Man Traps (MT).

1. MT1 Interlock Time Zone.  
Unique to a specific Door and not shared.  
24Hr - Off when linked to.
2. MT1 Non-link Shared Time Zone.  
Shared TZ and not linked to.  
24Hr Time Zone.



## Inputs / Door Contacts

### Create Inputs / Door Contacts

1. Input on the 1044 from the Door contact.
2. Assign MT1 Non-link Shared Time Zone.

Device: 6 Input: 2 MT1 Dr 2 Contact

General | Options | Icons/ASCII Out |

Location #: Main Building

Device #: 6: 1044A (input cont)

Input #: 2

Name: MT1 Dr 2 Contact

TZ 1: MT1 Non-Link Shared TZ TZ 2: ....

TZ 3: .... TZ 4: ....

Notes:

Print Linking Report Previous Next Cancel OK

Device: 6 Input: 2 MT1 Dr 2 Contact

General | Options | Icons/ASCII Out |

Location #: Main Building

Device #: 6: 1044A (input cont)

Input #: 2

Name: MT1 Dr 2 Contact

TZ 1: MT1 Non-Link Shared TZ TZ 2: ....

TZ 3: .... TZ 4: ....

Notes:

Print Linking Report Previous Next Cancel OK

## Outputs

### Create Outputs.

1. Create one Output on the 1043 per Door.  
Connected to locks on N.O contacts.  
No TZ.

Device: 4 Output: 1 MT1 Dr1

General | Options |

Location #: Main Building

Device #: 4: 1043A (output cont)

Output #: 1

Name: MT1 Dr1

TZ 1: .... TZ 2: ....

TZ 3: .... TZ 4: ....

Notes:

Print Linking Report Previous Next Cancel OK

Device: 4 Output: 2 MT1 Dr2

General | Options |

Location #: Main Building

Device #: 4: 1043A (output cont)

Output #: 2

Name: MT1 Dr2

TZ 1: .... TZ 2: ....

TZ 3: .... TZ 4: ....

Notes:

Print Linking Report Previous Next Cancel OK

2. Create one Virtual Output on the 1044 per Door.  
Assign MT1 Non-link Shared TZ.

Device: 6 Output: 1 VO MT1 DR1

General | Options |

Location #: Main Building

Device #: 6: 1044A (input cont)

Output #: 1

Name: VO MT1 DR1

TZ 1: MT1 Non-Link Shared TZ TZ 2: ....

TZ 3: .... TZ 4: ....

Notes:

Print Linking Report Previous Next Cancel OK

Device: 6 Output: 2 VO MT1 DR2

General | Options |

Location #: Main Building

Device #: 6: 1044A (input cont)

Output #: 2

Name: VO MT1 DR2

TZ 1: MT1 Non-Link Shared TZ TZ 2: ....

TZ 3: .... TZ 4: ....

Notes:

Print Linking Report Previous Next Cancel OK

## Linking Groups

Linking Group A “ControlGroup” for each door of MT1.

1. D1 lock output. MT1 Dr1.  
TZ - Interlock TZ Dr1.  
Response Type - Pulse.  
Pulse Time - As Desired.
2. D1 Input Contact.  
MT1 Dr1.  
TZ - Interlock TZ Dr1.  
Response Type - Pulse.  
Pulse Time - As Desired.

Linking Group: GP A MT1 Dr1 Control

General | Linking Group Components |

Location Name: Main Building

Name: GP A MT1 Dr1 Control

Notes:

Previous Next Cancel OK

Linking Group: GP A MT1 Dr1 Control

General | Linking Group Components |

Only List Selected Components:

Select a component from the list and assign a response type to include the component in the group.

Time Zone: MT1 Interlock TZ DR1

Response Type: Pulse

Pulse Time: 10

Time Type:  Minutes  Seconds

Previous Next Cancel OK

Note: GP A MT1 Dr2 is set the same.

Linking Group: GP A MT1 Dr2 Control

General | Linking Group Components |

Location Name: Main Building

Name: GP A MT1 Dr2 Control

Notes:

Previous Next Cancel OK

Linking Group: GP A MT1 Dr2 Control

General | Linking Group Components |

Only List Selected Components:

Select a component from the list and assign a response type to include the component in the group.

Time Zone: MT1 Interlock TZ DR2

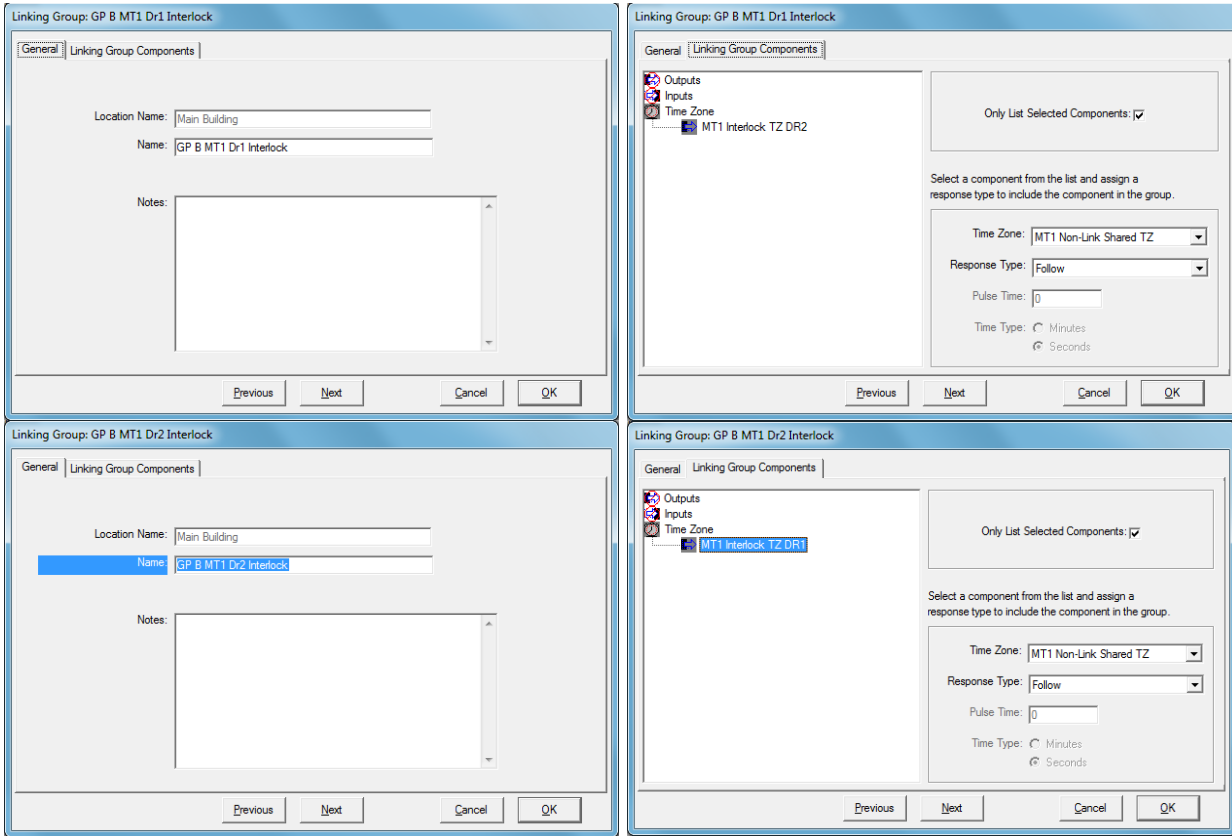
Response Type: Pulse

Pulse Time: 10

Time Type:  Minutes  Seconds

Previous Next Cancel OK

Linking Group B “Interlock Group” for each door of MT1.  
MT1 Interlock of **opposing door**.  
Time Zone - MT1 Non-Link Shared TZ.  
Response Type - Follow.



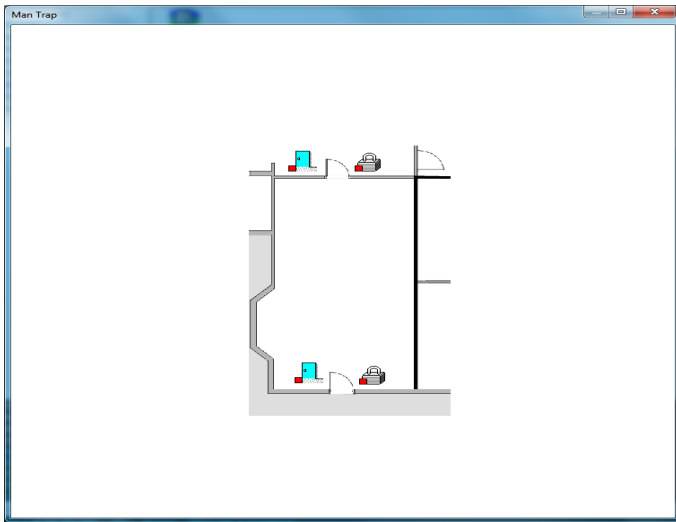
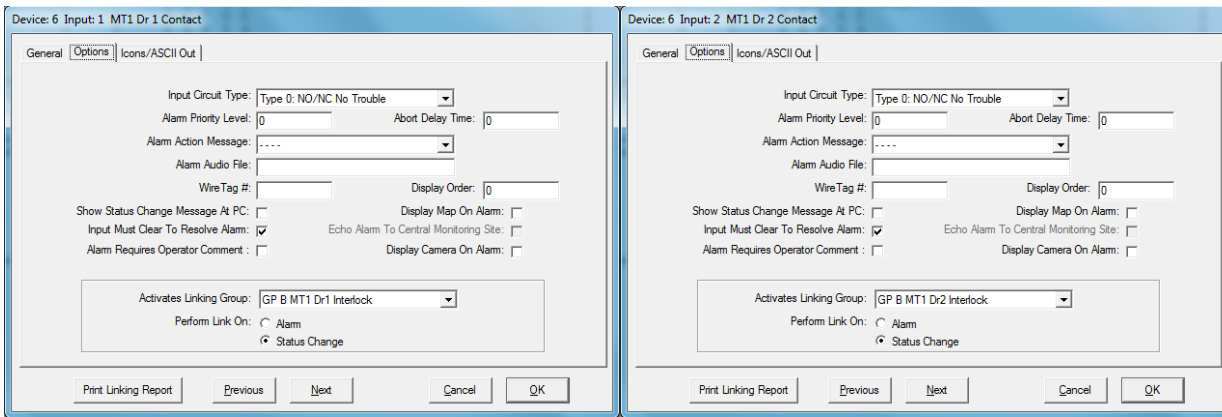
## Linking Group Assignments for Activation.

1. VO MT1 Dr1.  
Activates Linking Group - GP A MT1 Dr1 Control.  
Perform Link When - Open.
2. VO MT1 Dr2.  
Activates Linking Group - GP A MT1 Dr2 Control.  
Perform Link When - Open.
3. Output MT1 Dr1.  
Activates Linking group - GP B MT1 Dr1 Interlock.  
Perform Link When - Secure.
4. Output MT1 Dr2.  
Activates Linking Group - GP B MT1 Dr2 Interlock.  
Perform Link When - Secure.
5. MT1 Dr1 Contact.  
Activates Linking Group - GP B MT1 Dr1 Interlock.  
Perform Link On - Status Change.
6. MT1 Dr2 Contact.  
Activates Linking Group - GP B MT1 Dr2 Interlock.  
Perform Link On - Status Change.

The image displays four screenshots of a software configuration interface, arranged in a 2x2 grid. Each window is titled 'Device: [ID] Output: [ID] [Device Name]' and contains a 'General' tab with various settings for linking groups.

- Top-Left Window:** 'Device: 6 Output: 1 VO MT1 Dr1'. The 'Activates Linking Group' dropdown is set to 'GP A MT1 Dr1 Control'. The 'Perform Link When' radio buttons are set to 'Open'.
- Top-Right Window:** 'Device: 6 Output: 2 VO MT1 Dr2'. The 'Activates Linking Group' dropdown is set to 'GP A MT1 Dr2 Control'. The 'Perform Link When' radio buttons are set to 'Open'.
- Bottom-Left Window:** 'Device: 4 Output: 1 MT1 Dr1'. The 'Activates Linking Group' dropdown is set to 'GP B MT1 Dr1 Interlock'. The 'Perform Link When' radio buttons are set to 'Secure'.
- Bottom-Right Window:** 'Device: 4 Output: 2 MT1 Dr2'. The 'Activates Linking Group' dropdown is set to 'GP B MT1 Dr2 Interlock'. The 'Perform Link When' radio buttons are set to 'Secure'.

Each window includes fields for 'Click Box To Select Icon', 'Wire Tag #', 'Display Order', 'Fail Secure Lock', 'Show Open/Secure Message At PC', 'Camera', and 'State When Linked To'. At the bottom of each window are buttons for 'Print Linking Report', 'Previous', 'Next', 'Cancel', and 'OK'.



## NOTES

- Inputs and Virtual Outputs are placed on the Maps for unlocking doors.
- Under each Device - Deselect Use Input 7 & 8.
- Under each Device - Deselect Link Granted Events to Output One and Exit Request.

## ONE TOUCH OPERATION

1. File and Exit WinDSX.
2. Go to the WinDSX folder.
3. Open the RunData folder.
4. Open WS\_Settings.txt.
5. Go to output\_context\_menu\_ids.  
Set value at 1008.
6. Restart WinDSX.

